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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,570	06/24/2005	Yohei Takahashi	274373US2PCT	6704

22850 7590 02/24/2010

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EXAMINER	
PHASGE, ARUN S	

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
02/24/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Response to Arguments

Applicant's arguments filed 1/25/10 have been fully considered but they are not persuasive.

Applicants argue that the examiner "merely offers circular and conclusory reasoning" in making the final rejection.

The secondary reference discloses conventional arrangements for the formation of electrodeionization cell (col. 10, lines 36-55). There is no circular or conclusory reasoning in making a rejection using well known and conventional arrangements in one electrodeionization for conventional reasons and applying it to another arrangement to obtain the same results.

Applicants further argue that the sheets are already layered and further go into a discussion into the water dissociation reactions. However, what the applicants fail to argue is why the same type of arrangement taught by Liang would not perform these reactions. The Liang patent uses the layers of ion exchange as claimed (col 10, lines 9-24 and fig 6) and would structurally meet the claims as presently recited with the same plurality of contacting points and large contact area.

With regard to the Sugo patent, applicants further argue that the mosaic ion exchanger would allow water bypasses, "since they are in parallel." It is interesting to

note that claim 18 as amended would likewise allow the water bypasses, since they too are in parallel.

In any event, the Liang patent discloses the arrangement of alternating layers of anion and cation exchange material and there would be no water bypass, since they are not in parallel to the membrane.

Applicants further allege that "[T]he ion exchange materials used in Liang are granulated ion-exchange resins." The examiner is unable to find this in the reference, rather the Liang patent teaches that the "materials may be, for example, beads, fibers, woven materials, non-woven material and bound resin beads." (col. 11, lines 1-5).

With respect to the water flow through the spaces between the ion-exchange resin that is supposed to be different from the claimed apparatus, it is unclear and applicants have no cogently explained how the water would pass through the cell, if no through spaces between ion exchange material.

The argument to the narrowness of the deionization compartment (i.e., about 2mm to about 20 mm) is without claims basis and is therefore moot.

With respect to the structural arrangement newly recited in claim 18, the placement of the anion exchange layer adjacent the anion exchange membrane merely

produces a thicker anion exchange membrane or layer which would be an obvious modification to an apparatus claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arun S. Phasge/
Primary Examiner, Art Unit 1795

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